



Department of the Environment

Canadian Environmental Protection Act, 1999

Notice is hereby given that, pursuant to section 127 of the *Canadian Environmental Protection Act, 1999* (CEPA 1999), Disposal at Sea Permit No. 4543-2-03645 authorizing the loading for disposal and the disposal of waste or other matter at sea is approved. The permit is published on the CEPA Registry on Tuesday, May 17, 2016.

1. *Permittee*: Fraser River Pile & Dredge (GP) Inc., New Westminster, British Columbia.

2. *Waste or other matter to be disposed of*: Dredged material.

2.1. *Nature of waste or other matter*: Dredged material consisting of sand, silt, clay or gravel.

3. *Duration of permit*: Permit is valid from June 25, 2016, to June 15, 2017.

4. *Loading site(s)*: South Arm of the Fraser River Estuary, British Columbia. The loading of dredged material authorized by this permit is restricted to the following locations: Sand Heads, Sand Heads Reach, Steveston Bend, Steveston Cut, Woodward's Reach, No. 5 Road Bend, Gravesend Reach, Purfleet Point Bend, St. Mungo's Bend and Annieville Channel, as described in the drawing titled "Vancouver Fraser Port Authority Main Channel Reaches" submitted in support of the permit application.

5. *Disposal site(s)*:

(a) Point Grey Disposal Site, within a 1-nautical mile radius of 49.25667° N, 123.36500° W North American Datum of 1983 (NAD83); and

(b) Sand Heads Disposal Site (for sand only), bound by 49.10200° N, 123.34033° W; 49.10517° N, 123.31383° W; 49.09567° N, 123.31600° W; and 49.08700° N, 123.32733° W (NAD83).

6. *Method of loading*: Loading will be carried out using a cutter suction dredge, a trailing suction hopper dredge, a barge-mounted excavator or a clamshell dredge.

7. *Route to disposal site(s) and method of transport*: Most direct navigational route from the loading site to the disposal site via pipeline, towed hopper scow, flat scow or hopper dredge.

8. *Method of disposal*: Disposal will be carried out by pipeline, bottom dumping, end dumping, or cutter suction dredge.

9. *Total quantity to be disposed of:* Not to exceed 1 750 000 cubic metres, place measure.

10. *Fees:* The fee prescribed by the *Disposal at Sea Permit Fee Regulations* shall be paid by the Permittee in accordance with those regulations.

11. *Inspection:*

11.1. By accepting this permit, the Permittee and its contractors accept that they are subject to inspection pursuant to Part 10 of CEPA 1999.

11.2. The Permittee shall ensure that records of all loading and disposal activities are kept on site for the duration of the permit and are available for inspection by any enforcement officer or analyst, for two years following the expiry of the permit.

11.3. Ships operating under the authority of this permit shall carry and display a radar-reflecting device at all times mounted on the highest practical location.

12. *Contractors:*

12.1. The loading or disposal at sea referred to under this permit shall not be carried out by any person without written authorization from the Permittee.

12.2. The Permittee shall ensure that all persons involved in the loading, transport or disposal activities authorized by this permit conduct these activities in accordance with the relevant permit conditions.

13. *Reporting and notification:*

13.1. The Permittee shall provide the following information at least 48 hours before loading and disposal activities commence: name or number of ship, platform or structure used to carry out the loading and/or disposal, name of the contractor including corporate and on-site contact information, and expected period of loading and disposal activities. The above-noted information shall be submitted to the Environmental Enforcement Division of the Department of the Environment, Pacific and Yukon Region, 604-666-9059 (fax) or ec.immersionenmerrpy-disposalatseapyr.ec@canada.ca (email).

13.2. The Permittee shall submit a written report to the Minister, as represented by the Regional Director of the Environmental Protection Operations Directorate, Pacific and Yukon Region, 201–401 Burrard Street, Vancouver, BC V6C 3S5, 604-666-6800 (fax) or ec.immersionenmerrpy-disposalatseapyr.ec@canada.ca (email), within 30 days of the expiry of the permit. This report shall contain the following information: a list of all work completed pursuant to the permit, including the location of the loading and disposal sites used, the quantity of matter

disposed of at the disposal sites, and the dates on which disposal activities occurred.

13.3. At all times, a copy of this permit and of documents and drawings referenced in this permit shall be available at the loading site and on all powered ships directly engaged in the loading and disposal operations.

14. Special precautions:

14.1. The Permittee shall submit a written dredged material disposal plan to the Minister, as represented by the Regional Director of the Environmental Protection Operations Directorate, Pacific and Yukon Region, identified in paragraph 13.2, for approval by the Department of the Environment prior to the commencement of the first dredging operation authorized by this permit. The plan shall address procedures to accurately measure or estimate quantities of dredged material disposed of at the disposal sites, vessel tracking and a schedule for use of the disposal sites. Modifications to the plan shall be made only with the written approval of the Department of the Environment.

14.2. The loading and disposal at sea activities referred to under this permit shall be carried out in accordance with the following measures:

(a) A Department of Fisheries and Oceans approved marine mammal observer (MMO) (during the period from May 1, 2016, to October 31, 2016) or officer of the bridge (OB) (during the period from November 1, 2016, to April 30, 2017) must be dedicated to maintaining constant observations for detecting southern resident killer whales in the ship's vicinity prior to and during loading and/or disposal at sea activities conducted in southern resident killer whale critical habitat and ensure that:

i) A killer whale safety zone must be established at a radius of 1000 metres from the vessels undertaking the loading and disposal activities.

ii) Loading and disposal activities shall be halted immediately if a killer whale enters the safety zone.

iii) Loading and disposal activities can start, or be re-initiated, only after killer whales have not been observed in the safety zone for 30 minutes.

iv) If works will be occurring at night or at times of poor visibility, killer whale observations shall be conducted using a hydrophone to monitor for whale sounds in surrounding waters.

v) The MMO or OB shall document observations of killer whales and ensure mitigation measures (e.g. work stoppages) are implemented.

vi) If disturbance of any killer whale is observed within the safety zone, all operations shall be suspended immediately and notification provided to the local fishery officer or the Department of Fisheries and Oceans reporting hotline at 1-800-465-4336.

(b) An environmental monitoring report shall be submitted to the Department of Fisheries and Oceans, care of Mr. Paul Cottrell, Paul.Cottrell@dfo-mpo.gc.ca (email) and to the Minister, as represented by the Regional Director of the Environmental Protection Operations Directorate, Pacific and Yukon Region, identified in paragraph 13.2, within 30 days of the expiry of the permit. The report shall include details on the loading and disposal activities in southern resident killer whale critical habitat and any observations from the MMO and OB including the following:

- i) Date, time, position (latitude and longitude), and number of killer whale observations;
- ii) Date and time of all work stoppages or start-up delays because of killer whales, and number of animals;
- iii) Detailed description(s) of all observations of killer whale disturbance or other impacts.

14.3. Disposal activities at the Sand Heads site, located within southern resident killer whale critical habitat, are restricted to the disposal of material dredged from the following reaches of the south arm of the Fraser River: Sand Heads, Sand Heads Reach, Steveston Bend, and Steveston Cut, as described in the drawing titled "Vancouver Fraser Port Authority Main Channel Reaches" submitted in support of the permit application.

Stéphanie Johnson
Regional Director
Environmental Protection Operations Directorate
Pacific and Yukon Region

On behalf of the Minister of Environment and Climate Change

Signed on May 11, 2016